

memorandum

Octobers/ 1998

REPLY TO
ATTN OF:

OH: BROWN

Department of Energy

Ohio Field Office

OH-0049-99

SUBJECT: **PHASE I ASSESSMENT OF TECHNICAL QUALIFICATION PROGRAM (TQP)**

TO: Steve Richardson, Chairperson, Federal Technical Capability
Panel, Oak Ridge Operations Office

Forwarded for your review and comment is the DOE, Ohio Field Office (DOE-OH) Phase I Assessment Report. The assessment was conducted in accordance with the revised DOE Implementation Plan for DNFSB Recommendation 93-3.

The report identified some strengths and weaknesses associated with the OH-TQP. Also included in the report are recommendations for enhancement. The Ohio Field Office plans to update the TQP and take advantage of the assessment recommendations while preserving the current strengths of the program. A copy the plan will be forwarded to you by November 20, 1998.

If you have questions or require additional information on the subject, please contact Nat Brown at (937) 865-5051.

cc :

Tom Evans, HR
Executive Secretary, FTCP

G. Leah Dever
Manager

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U.S. Department of Energy

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Ohio Field Office
Technical Qualification Program
Phase I Self Assessment

September 25, 1998



EXECUTIVE SUMMARY

In response to the Defense Nuclear Facilities Safety Board Recommendation 93-3, *Improving Department of Energy Technical Capability in Defense Nuclear Facilities Programs*, the Department developed a 93-3 Implementation (IP) which included requirements for a formal Technical Qualification Program (TQP). To fulfill the commitments of the IP, the Ohio Field Office (OH) established a TQP and selected 103 Federal staff including managers, supervisors, and individual contributors at three of its five sites as participants. The IP was revised during the first half of calendar year 1998 to include, among other things, a requirement for phased self-assessments of the TQP.

The Ohio Field Office conducted its Phase I self-assessment of the TQP from September 8, 1998 through September 25, 1998. The purpose of this assessment was to determine the extent to which OH accomplished its objective in implementing the TQP as specified in the requirements and guidance provided in the 93-3 Implementation Plan, DOE Order 360.1, and OH procedures and to identify areas of opportunity for continuous improvement. An internal team of evaluators was selected consisting of Assistant Managers, Senior Technical Safety Managers, the Technical Training Manager, and the OH Senior Technical Advisor and representative to the Federal Technical Capability Panel who served as the Team Leader.

The assessment methodology included reviews of training and qualification records, functional standards, plans and procedures, and other administrative documents supporting the program.

The results of the assessment indicates that OH has a well-documented TQP; that implementation of the program met OH objectives and complies with the requirements of DOE Order 360.1. Notable strengths of the program include:

- O Ninety-five per cent of OH technical staff participation in the TQP.
- O The Individual Development Plan has been linked to the TQP providing enhanced training opportunities for participant.
- O The TQP is integrated with personnel-related activities such as position descriptions, vacancy announcements, and recruiting.

Some weaknesses or areas for improvement include:

Lack of requirements for site-specific competencies for all positions participating in the program

Some participants are not familiar with the roles and responsibilities for the implementation of the TQP

Performance standards are not linked to the TQP

INTRODUCTION

The Department of Energy's 93-3 Implementation Plan which was developed in response to the DNFSB Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*, established requirements for a formal Technical Qualification Program (TQP). The program applies to both Headquarters and Field technical personnel who are responsible for management oversight and/or technical guidance impacting safe operations at DOE defense nuclear facilities.

The Department formalized the TQP in May 1995 via DOE Order 360.1. Approximately 24 Department-wide technical-qualification standards were approved by senior management and issued for use. The Ohio Field Office selected 103 Federal staff at three of its sites as participants in the TQP. Following the selection, the Technical Training Division conducted workshops at each of the three sites to brief the participants on the TQP including the Technical Qualification Record and its intended use. The Technical Training Division also provided various forms and assistance to make training and development decisions and to document the qualification process. A training coordinator was appointed by each site director to work with Human Resources and the Technical Training Division. During 1996, a Senior Technical Safety Manager (STSM) standard was approved and issued for use and 13 senior Federal staff were selected to participate in the STSM qualification program.

The purpose of this report is to document the results of the Phase I self-assessment and comply with the requirements of the revised IP. The assessment was conducted to determine the extent to which OH accomplished its objectives in implementing the TQP. The assessment will also provide the basis for continuous improvement in the qualification program.

This report is organized into five sections including: an executive summary, an introduction, the scope and methodology, the results, a summary and an appendix. The executive summary provides a brief overview of the assessment team composition, dates of the assessment, and a brief description of the results. The introduction covers background information and the purpose of the report. The scope and methodology section identifies the team leader and team members, the assessment objectives and criteria, and the methodology applied in conducting the

assessment. The results section provides information on the status of achieving the objective, including

OH-TQP and lists several recommendations. Finally, the appendix includes several attachments of data gathered or used during the assessment.

SCOPE AND METHODOLOGY

In accordance with the revised 93-3 Implementation Plan, each Program or Field element responsible for defense nuclear facilities is required to complete a Phase I self assessment of its Technical Qualification Program. The Ohio Field Office TQP includes participants from the Fernald Project Office, the Miamisburg Project Office, the West Valley Project Office and the Office for Compliance Support. The Senior Technical Advisor has oversight responsibility for the program which is administered by the Technical Training Division. The scope of the TQP assessment includes a review of the processes used in implementing the program, the program decisions made and the participants records and documentation associated with the seven objectives listed below. The criterion for each objective is listed on the assessment form in Attachment A in the Appendix.

TQP-1 Demonstration of Competence: The program clearly identifies and documents the process used to demonstrate employee technical competence.

TQP-2 Competency Levels: Competency requirements are clearly defined and consistent with applicable industry standards for similar occupations.

TQP-3 Plans and Procedures: Plans and/or procedures are developed and implemented to govern the administration of the program.

TQP-4 Qualification Tailored to Work Activities: The program includes the identification of unique Department and position-specific work activities, and the knowledge and skills necessary to accomplish that work.

TQP-5 Credit for Existing Technical Qualification Program(s): The program is structured to allow credit for other technical qualification program accomplishments.

TQP-6 Transportability: Competency requirements that are identified as having Department-wide applicability are transferable.

TQP-7 Measurable: The program contains sufficient rigor to demonstrate compliance to the principles.

The team conducting the Phase I TQP assessment consisted of the following OH personnel:

Team Leader - Nat Brown, Senior Technical Advisor and Technical

Capability Agent

Tulanda Brown, Technical Training Manager/Senior Nuclear
Criticality Engineer

Dave Kozlowski, Associate Director for Safety and
Assessments, Fernald Environmental Management Project
Office

Oba Vincent, Deputy Director, Miamisburg Environmental
Management Project Office

Lee Stevens, Assistant Manager, Office of Compliance and
Support

The basis for the assessment was derived from the document entitled, *Technical Qualification Program Assessment Guidance and Criteria*, dated July 1998 and provided by the Federal Technical Capability Panel. The requirements were assembled into assessment instruments to facilitate documentation. The information gathered was analyzed and incorporated into the report as findings. The approach focused on three methods of information gathering:

- 4 a review of training and qualification records for 40 TQP participants selected at random;
- O a review of functional standards, plans and procedures and directives developed for implementing the TQP program; and
- 0 a surveys of program participants.

RESULTS

The status of the training and qualification records review and the review of functional standards, plans and procedures and directives is included in Appendix A. The results of the participants surveys are shown in Appendix B. Finally, Appendix C shows the completion status of all participants by functional area.

The objectives and criteria for this assessment were met. The program is mature; includes a systematic approach to certifying qualifications; is linked to the Individual Development Plan process; and contains extensive documentation of all qualification records including a validation file. There were criteria identified by the team during the review process that indicate improvements in several areas would enhance the overall program. Responses to several questions in the survey also indicate that communication of requirements can be improved.

At inception, OH elected to utilize functional standards approved by DOE-HQ. In

several cases, site-specific standards were developed. Since OH is a closure office (100% environmental restoration), mission needs will perhaps change as the clean-up

progresses. Currently there are no provisions for reviewing existing standards and position descriptions and where necessary, adding site specific competency requirements to meet mission changes.

A procedure that integrates the TQP with related personnel activities is in place at OH. The position description for the Senior Technical Advisor/Federal Technical Capability Agent includes responsibilities for overseeing the implementation of TQP procedural requirements and the performance standard includes measurement criteria to verify that those responsibilities are being performed. However, no provisions exist to ensure that all TQP positions clearly reflect the technical competencies in the work being performed and performance standards do not necessarily include measurement criteria for all positions in the TQP.

Sixty three per cent of participants surveyed provided responses to the questions in the survey. One hundred per cent of respondents confirmed that the IDP is used to reflect training requirements however, seventy four per cent either feel that the TQP does not provide for continued training or they are unsure if it does. Other areas that the survey results indicate attention is required include:

The type of training used to enhance qualifications of TQP participants;

The possible need for site/position specific competency requirements;
and

Clarification of roles and responsibilities in the qualification process

SUMMARY

As stated previously, the OH-TQP is mature and has been implemented in accordance with established requirements. One hundred per cent of the original TQP participants have had their qualifications certified to the General Technical Base standard and at least one primary functional standard for the particular position in which they are assigned. Several participants have also been to a second primary or secondary functional standard.

Recommendations:

1. Managers/Supervisors review and update, where necessary, position descriptions to ensure that competency requirements are included
2. The Training Division conduct an evaluation of the courses used to satisfy qualification requirements to ensure that objectives for enhancing the knowledge base for TQP participants can be met.

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2. The Training conduct an evaluation of the courses uses to satisfy qualification requirements to ensure that objectives for enhancing the knowledge base for TQP participants can be met.
3. The Training Division review and update procedures to clarify the roles and responsibilities in the qualification process and brief managers and supervisors.
4. Human Resources Division review and update the performance appraisal process, so that it includes measurement criteria to rate the performance of technical competencies.
5. Training Division revise TQP procedures to add provisions for periodic reviews of functional standards to ensure that mission needs are covered.